

ANNEX 2

Study programme for students from UNIBO (from a.y. 2022-2023)

FIRST YEAR AT UNIBO (Sept22-Aug23)

I YEAR @ UNIBO	CREDITS	PERIOD	YEAR
AEROSPACE STRUCTURES	6	1	1
FATIGUE AND DAMAGE TOLERANCE	6	1	1
ATMOSPHERIC FLIGHT DYNAMICS	6	2	1
SPACECRAFT ORBITAL DYNAMICS AND CONTROL	6	2	1
MATHEMATICAL METHODS FOR ENGINEERING	6	1	1
APPLIED AERODYNAMICS	6	1	1
FLOW STABILITY AND TURBULENCE	6	1	1
NUMERICAL ANALYSIS	6	1	1
2 ELECTIVE COURSES (SEE TABLE 1)	12		
CREDITS FIRST YEAR	60		

EQUIVALENT @ KTH	CREDITS	PERIOD	YEAR
SD2411 Lightweight Structures and FEM	8	1	1
SD2900 Fundamentals of Spaceflight	7,5	1	1
SD2601 Fundamentals of Flight	7,5	1	1
AK2030 Theory and Methodology of Science (Natural and Technological Science)	4,5	1	1
SF2863 Systems Engineering	7,5	1	1
SD2910 Spacecraft Dynamics	9	2	1
SD2920 System Integration for Space Technology, Part 1	3	2	1
ELECTIVE COURSES (SEE TABLE 2)	13		
CREDITS FIRST YEAR	60		

SECOND YEAR AT KTH (Aug23-Aug24)

II YEAR @ KTH	CREDITS	PERIOD	YEAR
AK2030 Theory and Methodology of Science (Natural and Technological Science)	4,5	1	1
EF2260 Space Environment and Spacecraft Engineering	6	1	2
EF2240 Space Physics	6	1	2
EF2262 Data Handling Systems for Satellites	6	1	2
1 ELECTIVE COURSE (SEE TABLE 2)	7,5	1	2
THESIS	30	4	2
CREDITS SECOND YEAR	60		

EQUIVALENT @ UNIBO	CREDITS	PERIOD	YEAR
ROCKET PROPULSION	6	1	2
SPACECRAFT SUBSYSTEMS AND SPACE MISSION DESIGN	6	1	2
SPACECRAFT ATTITUDE DYNAMICS AND CONTROL	6	1	2
RADIO COMMUNICATION AND RADAR SYSTEMS	6	1	2
ELECTIVE EXAM (SEE TABLE 4B)	6	1	2
INTERNSHIP ABROAD	6	2	2
THESIS	24	2	2
CREDITS SECOND YEAR	60		

TOTAL CREDITS - KTH DEGREE (60+60) 120

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Study programme for students from KTH (from a.y. 2022-2023) Track: Space

FIRST YEAR AT KTH (Aug22-Aug23)

I YEAR @ KTH	CREDITS	PERIOD	YEAR
SD2411 Lightweight Structures and FEM	8	1	1
SD2900 Fundamentals of Spaceflight	7,5	1	1
SD2601 Fundamentals of Flight	7,5	1	1
AK2030 Theory and Methodology of Science (Natural and Technol)	4,5	1	1
SF2863 Systems Engineering	7,5	1	1
SD2910 Spacecraft Dynamics	9	2	1
SD2920 System Integration for Space Technology, Part 1	3	2	1
ELECTIVE COURSES (SEE TABLE 2)	13		
CREDITS FIRST YEAR	60		

I YEAR @ UNIBO	CREDITS	PERIOD	YEAR
AEROSPACE STRUCTURES	6	1	1
FATIGUE AND DAMAGE TOLERANCE	6	1	1
ATMOSPHERIC FLIGHT DYNAMICS	6	2	1
SPACECRAFT ORBITAL DYNAMICS AND CONTROL	6	2	1
MATHEMATICAL METHODS FOR ENGINEERING	6	1	1
APPLIED AERODYNAMICS	6	1	1
FLOW STABILITY AND TURBULENCE	6	1	1
NUMERICAL ANALYSIS	6	1	1
2 ELECTIVE COURSES (SEE TABLE 1)	12		
CREDITS FIRST YEAR	60		

SECOND YEAR AT UNIBO (Sept23-Sept24)

II YEAR @ UNIBO	CREDITS	PERIOD	YEAR
ROCKET PROPULSION	6	1	2
SPACECRAFT SUBSYSTEMS AND SPACE MISSION DESIGN	6	1	2
SPACECRAFT ATTITUDE DYNAMICS AND CONTROL	6	1	2
RADIO COMMUNICATION AND RADAR SYSTEMS	6	1	2
ELECTIVE EXAM (SEE TABLE 4B)	6	1	2
INTERNSHIP ABROAD	6	2	2
THESIS	24	2	2
CREDITS SECOND YEAR	60		

EQUIVALENT @ KTH	CREDITS	PERIOD	YEAR
EF2260 Space Environment and Spacecraft Engineering	6	1	2
EF2240 Space Physics	6	1	2
SD2925 System Integration for Space Technology	3	1	2
ELECTIVE COURSES (SEE TABLE 2)	15	1	2
THESIS	30	2	2
CREDITS SECOND YEAR	60		

TOTAL CREDITS - KTH DEGREE (60+60) 120

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Study programme for students from KTH (from a.y. 2022-2023) Track: Systems Engineering

FIRST YEAR AT KTH (Aug22-Aug23)

I YEAR @ KTH	CREDITS	PERIOD	YEAR
SD2411 Lightweight Structures and FEM	8	1	1
SD2900 Fundamentals of Spaceflight	7,5	1	1
SD2601 Fundamentals of Flight	7,5	1	1
AK2030 Theory and Methodology of Science (Natural and Technol)	4,5	1	1
SF2863 Systems Engineering	7,5	1	1
EL2520 Control Theory and Practice, Advanced Course	7,5	2	1
SF2822 Applied Nonlinear Optimization	7,5	2	1
ELECTIVE COURSES (SEE TABLE 3A)	10	2	1
CREDITS FIRST YEAR	60		

I YEAR @ UNIBO	CREDITS	PERIOD	YEAR
AEROSPACE STRUCTURES	6	1	1
FATIGUE AND DAMAGE TOLERANCE	6	1	1
ATMOSPHERIC FLIGHT DYNAMICS	6	2	1
SPACECRAFT ORBITAL DYNAMICS AND CONTROL	6	2	1
MATHEMATICAL METHODS FOR ENGINEERING	6	1	1
APPLIED AERODYNAMICS	6	1	1
FLOW STABILITY AND TURBULENCE	6	1	1
NUMERICAL ANALYSIS	6	1	1
2 ELECTIVE COURSES (SEE TABLE 1)	12	1	2
CREDITS FIRST YEAR	60		

SECOND YEAR AT UNIBO (Sept23-Sept24)

II YEAR @ UNIBO	CREDITS	PERIOD	YEAR
ROCKET PROPULSION	6	1	2
SPACECRAFT SUBSYSTEMS AND SPACE MISSION DESIGN	6	1	2
SPACECRAFT ATTITUDE DYNAMICS AND CONTROL	6	1	2
RADIO COMMUNICATION AND RADAR SYSTEMS	6	1	2

EQUIVALENT @ KTH	CREDITS	PERIOD	YEAR
SF2852 Optimal Control Theory	7,5	1	2
ELECTIVE COURSES (SEE TABLE 3B)	6	1	2
ELECTIVE COURSES (SEE TABLE 3B)	6	1	2
ELECTIVE COURSES (SEE TABLE 3B)	10,5	1	2

ELECTIVE EXAM (SEE TABLE 4B)	6	1	2
INTERNSHIP ABROAD	6	2	2
THESIS	24	2	2
CREDITS SECOND YEAR	60		

TOTAL CREDITS - KTH DEGREE (60+60)	120
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ELECTIVE COURSES (SEE TABLE 3B)	10,5	1	1
THESIS	30	2	2
CREDITS SECOND YEAR	60		

TOTAL CREDITS - UNIBO DEGREE (60+60)	120
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